

REMARKS

Claims 1 – 5, 8 – 14, 16 -21 and 24 – 29 are pending in the present application. Claims 1 – 5, 8 – 14, 16 -21 and 24 – 29 were rejected in the Office Action mailed on May 26, 2005.

Claims 1 – 5, 8 – 14, 16 -21 and 24 – 29 were rejected under 35 U.S.C. 112, second paragraph. Claims 1, 20 and 24 have been amended to delete reference to reactive diluents. Claim 1 has been amended into correct Markush language. Accordingly, it is respectfully submitted that claims 1 – 5, 8 – 14, 16 -21 and 24 – 29 are patentable under 35 U.S.C. 112 second paragraph.

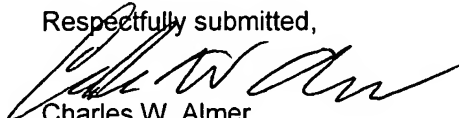
Claims 1 – 5, 8 – 14, 16 -21 and 24 – 29 were rejected under 35 U.S.C. 102(e) as anticipated by, or in the alternative as unpatentable under U.S.C.103(a), over U.S. Patent No. 6,833,629, issued to Ma. Ma discloses a dual cure B-stageable underfill for wafer level applications. The disclosure of Ma requires a two-composition system wherein the first composition is one of an acrylic, a cycloaliphatic epoxy, or a bismaleimide. The second composition of Ma is an epoxy compound with an imidazole and an anhydride or dianhydride. The first composition is chosen so that it has a curing temperature lower than that of the second composition. In contrast to Ma, the composition of the present invention has ingredients that cure at the same temperature, not two different temperatures. The entire formulation of the present invention B-stage solidifies through the physical process of solvent evaporation, but does not cure, and then finally cures at a temperature higher than that of the B-stage solidification temperature. A catalyst is added to the present invention, as set forth on page 6, lines 12 – 17, to prevent any curing (other than minimal pre-curing) during the B-stage and to allow for curing in one step. Claims 1 and 24 of the present application have been amended to reflect that the substantially the entire composition cures at a single temperature. As anticipation under 35 U.S.C. 102 requires identity of invention, in view of the significant differences between Ma and the present application, as amended, it is respectfully submitted that claims 1 – 5, 8 – 14, 16 -21 and 24 – 29 are patentable under 35 U.S.C. 102(e) over Ma. Further, as there is no disclosure, teaching or suggestion in Ma of a composition having components that cure at a single

temperature, it is respectfully submitted that claims 1 – 5, 8 – 14, 16 -21 and 24 – 29 are patentable under 35 U.S.C. 103(a) over Ma.

Claims 1 – 5, 8 – 14, 16 – 21 and 24 – 29 were rejected as unpatentable under the judicially created doctrine of obviousness-type double patenting over Ma in view of U.S. Patent No. 6,746,896, issued to Shi. The distinctions set forth above between Ma and the present application are equally applicable to the present rejection. The addition of the fluxing agent disclosure of Shi to the disclosure of Ma would not lead one skilled in the art to the present invention. Accordingly, it is respectfully submitted that claims 1 – 5, 8 – 14, 16 – 21 and 24 – 29 are patentable under the judicially created doctrine of obviousness-type double patenting over Ma in view of Shi.

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance. If there are any issues that the Examiner wishes to discuss, she is respectfully invited to contact the undersigned attorney at the telephone number set forth below.

Respectfully submitted,



Charles W. Almer

Reg. No.36,731

Tel. No. 908 707-3738

National Starch and Chemical Company
10 FINDERNE AVENUE
BRIDGEWATER, NJ 08807